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| 09/218,411 | 12/22/1998 | MICHAEL C.G. LEE | 71493-379 | 3145 |

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EXAMINER

NGUYEN, HANH N

| | |
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| ART UNIT | PAPER NUMBER |
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2662

DATE MAILED: 08/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/218,411

Applicant(s)

LEE ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Response filed on 06/05/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 is/are allowed.
- 6) ☒ Claim(s) 19-22 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 23,24 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lubin et al.** (US Pat. No. 6,434,395 B1 in view of **Jennings et al.** (US Pat. No. 6,430,174 B1.

In claims 19, 20 and 21, **Lubin** discloses, in Fig.1, a cellular handset 100 (a cellular handset) comprising an antenna 104 (an antenna) connected to a radio frequency module 102 having a transceiver (a radio transceiver connected to the antenna). See col.6, lines 28-32. The RF module 102 (a radio transceiver) is coupled to an A/D & D/A interface 308 (an A/D converter and a D/A converter) as described in Fig.3B (an A/D converter and a D/A converter connected to the transceiver). See col.10, lines 7-12. A radio control 108 (a cellular processor) is coupled to the A/D & D/A interface 308 (cellular processor connected to the A/D converters). See col.6, lines 40-44. Fig. 3A shows a speaker 334 (a speaker) that is coupled to an audio codec 336 (audio digital-analog converter) (a speaker connected to audio digital-analog converter), and a microphone 335 (a microphone) that is coupled to an audio codec 336 (an audio analog-digital converter) (a microphone connected to an audio analog-digital converter). See col.10, lines 42-47.

When the antenna 104 receives radio signals, the radio module 301, in Fig.3B, converts analog signals (analog baseband signals) into digital signals (raw data signals) (the transceiver converts analog baseband signals from the antenna into raw data signals). See col.10, lines 7-12. In Fig.3A, the audio codec 336 (audio digital-analog converter) receives the digital signals (voice data streams) from processor 303 and converts it into audio communication (analog waveforms) (the audio D/A converter converts voice data stream into analog waveforms); and voice communication (analog waveforms) is broadcasted from the speaker 334 (speaker broadcasts the analog waveform). See col.10, lines 35-47. When the antenna 104 transmits radio signals, the above steps are repeated similarly because the cellular handset 112 communicates bidirectionally. See Fig.1.

Lubin et al. does not disclose a digital cellular processor that processes raw data signals into voice over IP packetized data streams; an IP processor unpacketizes the voice over IP packetized data into voice data stream.

Jennings et al. discloses, in Fig.2B, a VOIP telephone 209 communicates with a mobile phone 220 via Internet 212 and a cellular network 224. In the VOIP communication, voice signals (analog) are digitized (raw data) and packetized at a sending location (process raw data into VOIP packetized data), then transmitted via an Internet in a digital format to a receiving location where they are converted into analog voice signals (unpacketize the VOIP packetized data into voice data streams) and played to a called party. See col.2, lines 1-5 & col.6, lines 22-28. Therefore, it would have been obvious to use VOIP communication of **Jennings et al.** in the radio telephone handset of **Lubin et al.** in order to packetize the raw data signal into the VOIP packet at the sending location and depacketize the VOIP packet into voice stream at the

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receiving location. The motivation of doing this is to transmit voice over data via IP network which is free for users while it costs more to make long distance calls between users via PSTN.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 22, 25, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by **Ray et al.** (US Pat. No. 6,067,529).

In claims 22, 25, 26 and 27, **Ray et al.** discloses, in Fig.2, a sale terminal 200 (a first Internet device) and a consumer 260 (a second Internet device). The sale terminal generates a short message 220 containing detail purchase information of the consumer and sends it to the consumer via an Internet 250 (generating a short message and forwarding the SMS message to

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the second Internet device). See col.4, lines 15-20 & 30-35. The consumer 260 receives the short message, and prints out a hard copy of short message 220 to get a refund when necessary (second internet device extracts IP address from the short message to connect to the first internet device). See col.5, lines 40-45

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered.

Claims 1-18 are allowed.

Claims 23, 24 and 28 are objected.

Claims 19-22 and 25-27 are moot in view of the new ground (s) of rejection.

In claims 19-21, Applicant argues that neither Lubin nor Jennings disclose the implementing voice over IP used to enable transmission of voice in a data communication system and data stream of digital cellular handset. Examiner believes that Jennings discloses in Fig.2B, a VOIP telephone 209 communicates with a mobile phone 220 via Internet 212 and a cellular network 224. In the VOIP communication, voice signals (analog) are digitized (raw data) and packetized at a sending location (process raw data into VOIP packetized data), then transmitted via an Internet in a digital format to a receiving location where they are converted into analog voice signals (unpacketize the VOIP packetized data into voice data streams) and played to a called party. See col.2, lines 1-5 & col.6, lines 22-28.

Therefore, it would have been obvious to use VOIP communication of **Jennings et al.** in the radio telephone handset of **Lubin et al.** which has been described in the above action in order to packetize the raw data signal into the VOIP packet at the sending location and

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depacketize the VOIP packet into voice stream at the receiving location. The motivation of doing this is to transmit voice over data via IP network which is free for users while it costs more to make long distance calls between users via PSTN.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Angle et al. (US Pat. No. 6,366,771 B1) discloses Wireless Communication Network Having Voice and Data Communication Capability.

Laiho (US Pat. No. 6,061,572) discloses Digital Cellular Telecommunications with Short Message Service Over Packet Channel.

Grob et al. (US Pat. No. 5,574,773) discloses Method and Apparatus of Providing Audio Feedback over a Digital Channel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:30 AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3988 for regular communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

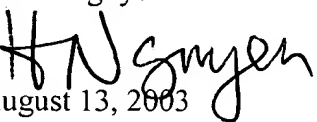
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Fax number: 703 872-9314

Hanh Nguyen


August 13, 2003